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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,643

04/02/2004

Guo-Hua Zheng

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EXAMINER

TRAN LIEN, THUY

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,643	Applicant(s) ZHENG ET AL.	
	Examiner Lien T. Tran	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,10,12-23,32 and 53-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,10,12-23,32,53-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 10,32,54-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is vague and indefinite. Claim 10 recites a composition according to claim 6 but claim 6 was cancelled; thus, it is not clear what is intended.

In claim 32: Line 5, the recitation of " said dietary fiber composition" does not have antecedent basis; it is not clear what composition the claim is referring to. There is no recitation of " a dietary fiber composition". Lines 6-7, the recitation of " the dietary fiber containing material" is unclear because it is not known what this material is; is it the beta-glucan compound or some other fiber material?

Claim 54 has the same problem as claim 32 with respect to the recitation of " the dietary fiber containing material".

Claim 55 has the same problem as claim 32.

Claims 1,3-5,10,12-23,32,53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (2003/0154974)

Morgan discloses a fiber composition from cereal grain such as barley and oats. The composition comprises beta glucan. The beta glucan gel , once formed, is washed with water to remove starch or protein or starch or protein that may have been hydrolyse. Starch may be removed by adding amylase; it is preferable during the glucan extraction to add an enzyme to reduce the average molecular weight of the glucan. The enzyme is cellulose. The low molecular weight beta glucan has an

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average molecular weight in the range of 5000-200000 daltons (5-200kd). (see paragraphs 0013, 0014, 0015, 0017, 0025, 0026, 0038.

Morgan discloses a fiber composition having the molecular weight as claimed. However, Morgan is silent with respect to the viscosity and the fat content. However, the fiber composition in Morgan is prepared by substantially the same method as disclosed and the composition has a molecular weight within the range claimed; thus, it is obvious the composition will have the same viscosity as claimed. As to the fat content, it is known in the art that different variety of grains will have different lipid content, thus, the fat content can vary depending on the type of grain used. Furthermore, it is known in the art to remove fat using agent such as alcohol. It would have been obvious to one skilled in the art to remove the fat in the Morgan product using known agent when it is desired to obtain product having very low fat content. This would have been within the skill of one in the art. As to the composition being stable, the beta glucan composition disclosed by Morgan has a molecular weight within the range claimed; thus, it is expected the viscosity is within the range claimed. Thus, whatever property results from the viscosity and molecular weight, it is expected the same result is obtained in the Morgan product.

Morgan does not disclose the protein content as claimed, the % of beta-glucan in the fiber composition, specific foods and the formulation for such foods as claimed.

Morgan discloses in paragraph 0024, “ prior to concentrating of beta-glucan, it is preferable to remove starch and/or protein”. Morgan also discloses in paragraph 0049 , “ the final product contains protein and starch; in some cases this less pure form of be-

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glucan may be the preferred product". Thus, Morgan teaches the removal of protein is optional and not required because he teaches starch or protein is removed and the removal is a preferred embodiment. Thus, it would have been obvious to one skilled in the art to not remove the protein when a less pure composition and a high protein content are desired. It would have been obvious to vary the protein content by using grains having high protein content or to add protein source to the composition when desiring composition having high protein content for nutrition purposes. Morgan discloses in paragraph 0019 to add the fiber composition to processed foods. Thus, it would have been obvious to one skilled in the art to add the fiber composition to any type of food when desiring to enrich such food with beta glucan to obtain the health benefits provided by beta glucan. Formulations for food products can vary. All the foods claimed are well known in the art; thus, it would have been within the skill of one in the art to determine the formulation for any particular food without undue experimentation. It would have been obvious to vary the amount of glucan in a composition depending on the fiber content wanted for the composition. This would have been an obvious matter of choice.

In the response filed 9/2/09, applicant argues the claims as amended are defined over Morgan because of the protein content and Morgan teaches the removal of protein. As stated in the rejection above, the protein content does not define over Morgan because the teaching of removing the protein is a preferred embodiment, not a required one. As to the comment concerning the use of arabinoxylan degrading enzyme, there is nothing in the claims which exclude the use of arabinoxylan degrading enzyme.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 18, 2009

/Lien T Tran/

Primary Examiner, Art Unit 1794
